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Economic Contribution of the Partial Exemption for Ethanol
From the Federal Excise Tax on Motor Fuel
Increased revenues and reduced dependence on foreign oil

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The federal tax incentive has been responsible in large part for building an American ethanol industry that has generated an estimated $33.4 billion (2008$) in tax revenue for the federal government and nearly $17 billion (2008$) of additional tax revenue for state and local governments since 1978, reduced America's tab for imported oil by $97.5 billion, helped reduce farm program payments by more than $3 billion annually since 2006, and put some $66 billion more into the pockets of Americans in the form of increased household income. By contrast, the federal government has spent just $30.4 billion in the form of the partial exemption for ethanol from the federal excise tax on motor fuel. All told, the return on investment (ROI) for each dollar expended in the form of the federal tax incentive for ethanol use is nearly 5 to 1. [1]

History of the Federal Tax Incentive for Ethanol Use

The first federal tax incentive for ethanol was a 40 cents per gallon exemption for ethanol from federal excise taxes on motor fuel enacted as part of the Energy Policy Act of 1978. Between 1978 and today the tax exemption has ranged between 40 and 60 cents per gallon. In its current form, the exemption is the Volumetric Ethanol Excise Tax Credit (VEETC) that was created by the American Jobs Creation Act of 2004. The VEETC replaces previous federal ethanol excise tax credits and provides blenders with a federal tax refund of 51 cents per gallon of ethanol on each gallon of ethanol blended with gasoline. Under provisions of the 2008 Farm Bill, the tax exemption will drop to 45 cents per gallon in 2009. The excise tax exemption plays an integral

[1] The calculation is a result of the sum of the increase in federal, state and local tax revenues, reduction in oil imports, and farm program payments compared to the total amount spent in the form of the ethanol tax incentive.

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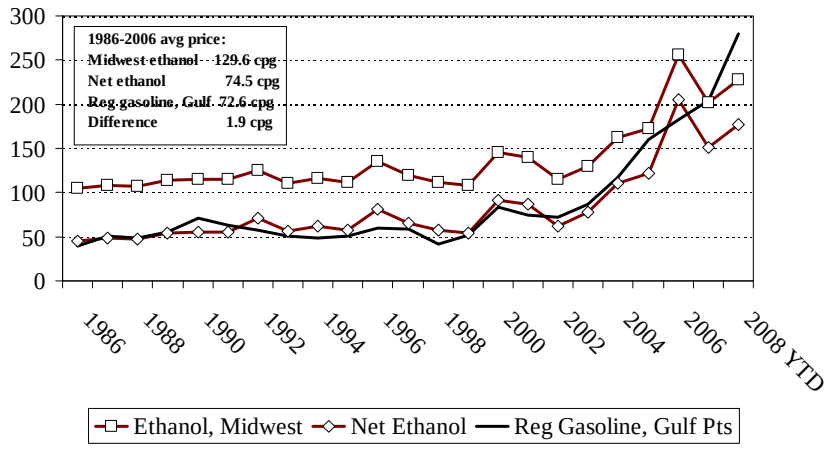
role in supporting investment and development in ethanol production facilities, next generation ethanol technologies, and the significant growth in the industry.

The Role of the Federal Tax Incentive for Ethanol Use

The importance of the excise tax exemption in making ethanol competitive with gasoline is illustrated in Figure 1. Between 1986 and 2006 the spot market price of ethanol in Midwest markets averaged 129.6 cents per gallon while the average price of regular gasoline at Gulf Points was 72.6 cents per gallon. Over this period ethanol was 57 cents per gallon more expensive than gasoline.[2] During this 20-year period the ethanol excise tax exemption averaged 55.1 cents per gallon reducing the difference between spot market ethanol and gasoline to 1.9 cents per gallon.

Figure 1
Spot Market Midwest Ethanol and Gasoline Prices



Source: OPIS; EIA

[2] In 2007 and 2008 crude oil and gasoline prices soared to record levels. While ethanol prices also increased they were generally below gasoline prices for most of the period.

Without the excise tax credit gasoline blenders would have little or no economic incentive other than the octane value to blend ethanol. Without this important incentive it is unlikely that the ethanol industry would have been able to compete with MTBE as an oxygenate to meet the carbon monoxide and RFG requirements of the Clean Air Act of 1990. However, between early 2007 and the fall of 2008, spot market ethanol prices were typically lower than wholesale gasoline prices, meaning a large amount of ethanol was being voluntarily blended as a relatively low-cost supply extender. The price differential, which sometimes reached as high as $1 per gallon, encouraged voluntary splash-blending and pre-blending and helped ethanol enter into new markets. Because of the price spread between ethanol and gasoline, E10 blends often retailed for 8 to 10 cents less per gallon than regular unleaded during this period.

The Economic Benefits of the Federal Tax Incentive for Ethanol Blending

The economic benefit of the ethanol excise tax credit can be estimated by examining the contribution of the ethanol industry over the period the excise tax credit has been in place. The benefits of the ethanol excise tax credit since its inception in 1978 include:

- More than 53 billion gallons of ethanol have been produced, or about 1.2 percent of all the motor gasoline sold over this period. (In 2008, ethanol represents 7% of the nation's gasoline supply.)

- The total volume of ethanol produced over the past three decades displaced nearly 1.9 billion barrels of imported crude oil (the amount of crude required to produce the ethanol equivalent of 34.9 billion gallons of gasoline) valued at $97.5 billion (2008$).

- The combination of spending for annual operations, ethanol transportation, and capital spending for new ethanol plant capacity added $228 billion to the nation's Gross Domestic Product (GDP) by 2008.

- New jobs are created as a consequence of increased economic activity caused by ethanol production. The increase in economic activity resulting from ongoing production and

construction of new capacity supported the creation of more than 210,000 jobs in all sectors of the economy. (Note: After 2006, this calculation includes only those gallons produced above the mandated levels as established first in the Energy Policy Act of 2005 and revised in the Energy Independence and Security Act of 2007. By comparison, the ethanol industry helped create 238,000 new jobs in 2007 as a result of the 6.5 billion gallons produced.)

- Increased economic activity and new jobs result in higher levels of income for American households. The production of ethanol put an additional $66.2 billion (2008$) into the pockets of American consumers since 1978.

- The ethanol industry has paid for itself since the inception of the excise tax credit. The combination of increased GDP and higher household income generated an estimated $33.4 billion (2008$) in tax revenue for the federal government and nearly $17 billion (2008$) of additional tax revenue for state and local governments since 1978. The estimated cost of the ethanol tax credit over this same period was $30.4 billion (2008$). *Consequently, the ethanol industry generated a surplus of about $3 billion for the Federal treasury over the past three decades.*

- The excise tax credit also has saved taxpayers money by reducing farm program outlays through higher prices for corn. Recent research published at Iowa State University estimated that the federal government saved $3.45 billion in 2007 alone because it was not making loan deficiency payments, as it was in 2005 and 2006.[3] Loan deficiency payments were established in 1985 as a way to protect farmer income when prices for commodities such as corn were abnormally low. Since 1998 the loan deficiency payment program has cost taxpayers more than $29 billion. USDA estimates that when loan deficiency payments are warranted due to low prices, every $0.10 per bushel increase in corn prices saves about $1 billion in loan deficiency payments.

[3] "Ethanol Subsidies: Are they a Plus or a Minus?" *The Farm Gate*. October 21, 2008. University of Illinois Extension. http://www.farmgate.uiuc.edu/archive/2008/10/ethanol_subsidi.html